

REMARKS

Rejection under 35 USC 102(b)

Claims 1, 2, 4-6, 10, 12-18, 20, and 25-35 are rejected as being anticipated in view of Lyu et al. (US 6,646,701). This rejection is respectfully traversed.

Lyu et al. disclose a liquid crystal display device containing a vertically aligned liquid crystal cell containing a nematic liquid crystal material having negative dielectric anisotropy, i.e., a so-called VATN display. See, e.g., the abstract.

Lyu et al. distinguish VATN displays from a twisted nematic (TN) display. When a twisted nematic liquid crystal display is in the off state, i.e., in absence of the electric field, the molecular axes of the liquid crystal molecules are aligned parallel to the substrates of the display. Conversely, when a vertically aligned twisted nematic (VATN) liquid crystal display is in the off state the molecules are aligned perpendicular to the substrates. On the other hand, when the TN display is in the on state the molecules are aligned perpendicular to the substrates. But, when the VATN display is in the on state the molecular axes of the liquid crystal molecules are aligned parallel to the substrates. See column 1, lines 21-51 and column 2, lines 31-35.

As can be seen in Figures 1A and 1B, the displays have two transparent insulating substrates, opposite and spaced apart from each other, and two transparent electrodes. Additionally, the displays have two alignment layers formed on the inner surfaces of the substrates, and between two substrates there is a liquid crystal material layer made of a chiral nematic liquid crystal having negative dielectric anisotropy. On the outer surface of the top substrate there is provided a polarizer, and on the outer surface of the bottom substrate there is provided an analyzer. See column 4, lines 14-34.

In the VATN mode, like in the TN mode, the applied electrical field, which is applied between the two parallel spaced electrodes, is perpendicular to the substrates and liquid crystal layer. However, in the IPS mode, the electrical field has a major component that is substantially parallel to the substrates. Compare applicants' claim 1. See also page 1, lines 11-25 of applicants' specification.

Thus, contrary to the assertion in the rejection, Lyu et al. do not disclose a liquid crystal display of the In Plane Switching (IPS) mode, and therefore the disclosure of Lyu et al.

MERCK-3078

does not anticipate applicants' claimed invention. The only reference to "IPS" in the disclosure of Lyu et al. is at column 11, lines 42-46, wherein it is stated:

Moreover, the film compensated VATN LCDS according to the present invention may be adapted to ECB (electrically controlled birefringence) VATN LCDs, fringe controlled multi-domain VATN LCDs, IPS (in-plane switching) mode VATN LCDs, etc.

This disclosure does not provide any description of an IPS liquid crystal display, nor does it describe how the vertically aligned twisted nematic (VATN) liquid crystal display disclosed by Lyu et al. are "adapted" to in-plane switching mode VATN liquid crystal displays

The rejection refers to Fig. 12B. As described at column 7, lines 54-65, this figure illustrates an arrangement of a first polarizer 11, an a-plate compensation film 20, a c-plate compensation film 30, a liquid crystal cell 50, and a second polarizer 10.

Lyu et al. provide no description of the structure or materials used for the a-plate compensation film 20 and the c-plate compensation film 30. Therefore, contrary to the assertion in the rejection, Lyu et al. do not disclose at least one first retardation film comprising optically uniaxial positive calamitic liquid crystal material and having an optical axis substantially parallel to the film plane. Similarly, Lyu et al. do not disclose one second retardation film comprising optically uniaxial positive calamitic liquid crystal material and having an optical axis substantially perpendicular to the film plane.

To establish anticipation, the rejection must indicate where the asserted anticipatory reference discloses each feature of the rejected claim. See, e.g., *Ex parte Levy*, 17 USPQ2d 1461, 1462 (POBA 1990) ["Moreover, it is incumbent upon the examiner to identify wherein each and every facet of the claimed invention is disclosed in the applied reference."]. In the instant case, the rejection fails to point out where Lyu et al. disclose all of the features recited in the rejected claims.

In view of the above remarks, it is respectfully submitted that the disclosure of Lyu et al. fails to anticipate applicants' claimed invention. Withdrawal of the rejection is respectfully requested.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,

/Brion P. Heaney/

Brion P. Heaney, Reg. No. 32,542
Attorney for Applicants

MILLEN, WHITE, ZELANO & BRANIGAN, P.C.
Arlington Courthouse Plaza 1
2200 Clarendon Boulevard, Suite 1400
Arlington, VA 22201
Direct Dial: 703-812-5308
Facsimile: 703-243-6410
Attorney Docket No.:MERCK-3078
Date: March 9, 2010